

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 2 and 4, AMEND claims 1 and 3 and ADD new claim 5 in accordance with the following:

1. (Currently Amended) A laser machining robot, in which both a laser machining head for laser machining and a distance sensor are mounted on ~~the a~~ robot arm tip end, a distance between the distance sensor and a workpiece is detected by the distance sensor, and the laser machining is carried out by moving said laser machining head while keeping a distance between the workpiece and a tip end of said laser machining head at a predetermined distance ~~based on the detected distance~~, the laser machining robot comprising:

control means for controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during said laser machining; and

means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity is changed by a moving control exerted by said control means.

2. (Cancelled)

3. (Currently Amended) A laser machining robot, in which a laser machining head that comprises a distance sensor and carries out laser machining is mounted on a tip end of a robot arm, a distance between the distance sensor and a workpiece is detected by the distance sensor, and the laser machining is carried out by moving said laser machining head while keeping a distance between the workpiece and a tip end of said laser machining head ~~based on the detected distance at a predetermined distance~~, the laser machining robot comprising:

control means for controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during said laser machining; and

means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity of said laser machining robot is changed by a moving control exerted by said control means.

4. (Cancelled)

5. (New) A method of controlling a laser machining robot, comprising:

controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during laser machining; and

changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity is changed by a moving control.